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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,862	12/28/2000	Yun Lung Chen	1916	2191

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WEI TE CHUNG
FOXCONN INTERNATIONAL, INC.
1650 MEMOREX DRIVE
SANTA CLARA, CA 95050

EXAMINER

PATEL, NIHIR B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,862

Applicant(s)

CHEN, YUN LUNG

Examiner

Nihir Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 30th, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

In reference to claim 11, the applicant argues that neither Lai nor Nelson teach a heat pipe that is attached to a heat generating electronic device on one end and to a heat sink on the other end. The examiner disagrees. Nelson does teach a heat pipe 38 that teaches to a heat-generating device 40 on one end and to a heat sink on the other end.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8, 9, 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai US Patent No. 5,509,465 in view of Frisch et al. US Patent No. 2,737,370. Lai discloses the applicant's invention as claimed with the exception of providing a slot being defined in the connecting tab of each of the fins and receiving an end of the connecting tab of an adjacent one of the fins. Frisch discloses an extended surface element for heat exchanger that does provide a slot 27 being defined in the connecting tab 17 of each of the fins and receiving an end of the connecting tab of an adjacent one of the fins (see figures 1-3). Therefore it would have been o

Claims 4, 5, 7, 12-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai U.S. Patent No. 5,509,465.

Referring to claim 12, Lai discloses applicant's invention as claimed with the exception that the slot is not located in each tapered tab of each fin instead the slots (55 and 56) are located on the fins. See figure 3. As long as the slot(s) receive an end tapered tab of an adjacent fin the location of the slot(s) should not matter therefore the location of the slot(s) (simply a design choice) would not solve any stated problem or produce any new and/or unexpected result.

Referring to claims 4, 5, 13 and 14 Lai discloses applicant's invention as claimed with the exception that Lai provides one locating portion that extends from each fin for forming intervals between the fins instead of 2 and it is not flanged so that it extends vertically up from the free end. You can have 1 locating portion or 2 locating portions it is simply a matter of design choice, and it will not solve any stated problem or produce any new and/or unexpected result.

Referring to claims 7 and 16, Lai discloses applicant's invention as claimed with the exception that Lai doesn't provide an L-shaped casing to hold the duct and fins together but rather provides a different shape of frame. You can have an L-shaped frame or an O shaped frame it is simply a matter of design choice, and it will not solve any stated problem or produce any new and/or unexpected results.

Referring to claims 10 and 19, Lai discloses applicant's invention as claimed with the exception that instead of screwing the fan on to the heat sink, Lai provides two retaining hooks 81 that interconnect the holes 80 in the housing of the fan and the ends of the rod members 6. You can either screw the fan on to the heat sink or hook it, it is simply a matter of design choice, and it will not solve any stated problem or produce any new and/or unexpected results.

Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai U.S. Patent No. 5,509,465 in view of Tanahashi et al. U.S. Patent No. 6,189,602.

Lai discloses applicant's invention as claimed with the exception that Lai doesn't mention the type of metal used to make duct.

Tanahashi discloses an electronic device with improved heat dissipation that clearly states that the heat pipe (duct) 38 and the heat receptacle plate 37 may be made of a highly heat-conductive metal such as copper and aluminum. Refer to figures 3 and 4 and column 3 lines 55-60.

Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai U.S. Patent No. 5,509,465 in view of Nelson U.S. Patent No. 5,339,214.

Lai discloses applicant's invention as claimed with the exception that Lai does not provide a heat pipe that is attached to a heat-generating electronic device on one end and to a heat sink on the other end.

Nelson discloses a multiple-fan microprocessor cooling through a finned heat pipe that does provide a pipe (duct) 38 that is attached to a heat-generating device 40 on one end and to a heat sink 34 on the other end.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful the examiner supervisor Henry Bennett can be reached at (571) 272 4791.

NP
February 8th, 2005



Henry Bennett
Supervisory Patent Examiner
Group 3700